

89% Oxygen

A second round of percent composition, ratios, two-way tables, and the math of mixtures.

[percent] [ratios] [two-way tables] [QUESTIONS ONLY] [PRINT-FRIENDLY]

NAME	PERIOD	DATE
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QUESTIONS ONLY - Practice independently or with a group. Use the class sheet as a model, but solve these numbers yourself.

PART A

Percent by mass

A 50 g sample contains 35 g of element X and 15 g of element Y.

1 Find the percent by mass of each element.

2 If a 120 g sample has the same composition, how many grams of X does it contain?

PART B

Breakfast math

A cereal serving has 18 mg of iron in a 60 g serving. A second cereal has 12 mg in a 40 g serving.

1 Find the iron per gram for each cereal.

2 Which cereal has the greater iron concentration?

PART C

The two-way sort

In a class, 14 students used a solid model, 9 used a liquid model, 8 seventh graders used a solid model, and 6 eighth graders used a solid model.

1

 How many students are in the class if these are the only two model types?

2

 How many eighth graders used a liquid model?

PART D

The air pie

A gas mixture is 78% nitrogen, 21% oxygen, and 1% other gases. A sample is 200 mL.

1

 Find the volume of each part.

2

 How much larger is the nitrogen volume than the oxygen volume?
